

Michigan's Wellhead Protection Program

The purpose of Michigan's Wellhead Protection Program (**WHPP**) is to protect public water supply systems (**PWSS**) which use groundwater, from potential sources of contamination. Protection is provided by identifying through hydrogeologic study, the area within a 10-year time of travel which contributes groundwater to PWSS wells, identifying potential sources of contamination within the area, and developing methods to cooperatively manage the area and minimize the threat to the PWSS. Low tritium water supplies (not >1.0 tritium unit) are protected by natural barriers and a circle of 1 mile radius is managed instead of an actual delineated area.

Unlike many programs throughout the country, Michigan's WHPP is a voluntary program. PWSSs who choose to participate in wellhead protection must develop a WHPP consistent with Part 28 Wellhead Protection Grant Assistance Rules (R325.12801 to R325.12820) administered by DEQ. Local WHPPs must specifically address seven elements:

1. Roles and duties for program development
2. Delineation of the wellhead protection area
3. Identification of potential and known contaminant sources
4. Management strategies
5. Contingency plans for the wellhead protection area
6. Development and implementation of a wellhead protection program for a new well or well field
7. Public participation

Funding for WHPP is available through a grant program providing a 50% grant that must be matched with 50% local funds. Activities that receive funding can include items such as:

- Wellhead delineation studies
- Abandoned well search and management programs
- Development of educational materials
- Passage of zoning language to protect groundwater
- Emergency management training for spills in wellhead protection areas
- Creation of partnership agreements between agencies and communities within the wellhead protection area

Grants are awarded for work performed between October 1 and September 30. Communities can apply for grant assistance annually. Deliverables are reviewed and approved by DEQ before payment is made to the PWSS.

Examples of program success are difficult to quantify because each WHPP is unique to local circumstances. However, the American Water Works Association (AWWA) Exemplary Source Water Protection Award provides recognition to a utility within Michigan that has done an outstanding job in implementing a local WHPP and identifies Michigan's nomination for the joint AWWA/USEPA national award. The following

communities went on to win the national AWWA/USEPA award for implementation of their local protection program:

- 1997 - The City of Coldwater
- 1999 - The Village of Lake Odessa
- 2000 - Lansing Charter Township
- 2004 - The City of Battle Creek (medium system)
- 2004 - The Village of Milford (small system)
- 2005 - The City of Ionia (small system)

Program Statistics

- Over 1.8 million people in Michigan are served by municipal water supplies using groundwater as the source.
- Approximately 64% of the municipal water supplies that use groundwater have participated in wellhead protection. This represents nearly 89% of the population served by municipal groundwater systems.
- Since the wellhead protection grant program began in 1999, 475 grants totaling nearly \$7.4 million have been awarded to 196 communities.
- On average, about 73% of the grants awarded are matched with local dollars and used.
- Of the 455 municipal water supplies using groundwater, 292 have participated to some degree in wellhead protection efforts.
- The DEQ has approved 206 wellhead delineations and 33 low tritium designations.
- The DEQ has approved 135 wellhead protection programs.

Contact Information

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